soil. The bark is of great value for binding twine and grafting purposes. It belongs to the family *Elwocarpacew*; by some it has been referred to the *Tiliacew* or basswood family.

## 3358. Cucurbita maxima.

Squash.

From Santiago, Chile. Received through Messrs. Lathrop and Fairchild (No. 186), June, 1899.

Hagitos. The native squashes are quite mixed as to varieties. Many sorts are of superior quality, often being used for fritters, etc. The following numbers, 3369 to 3372, are different varieties without native names.

## 3359. Opuntia geissei.

Prickly pear.

From Santiago, Chile. Received through Messrs. Lathrop and Fairchild (No. 169), July, 1899.

"It often does not rain for a whole year where this plant grows, at an altitude of 6,000 to 10,000 feet. The plants are about 6 feet high; flowers yellow; fruit 2 to 4 inches long, oval, yellow when ripe; the flesh wine colored; very juicy; used for lemonades, being quite sour. Plants very productive, habit bushy; fruits closely resemble the joints. Grows where heavy snows fall in winter. A new species, not yet known in Europe. For Arizona and California." (D. G. Fairchild.)

# 3360. Quillaja saponaria.

Soapbark.

From Santiago, Chile. Received through Messrs. Lathrop and Fairchild (No. 166), July, 1899.

"A rosaceous tree, native of Chile. The bark is used as a soap for washing woolens. It is unsuited for cottons, as it turns them yellow. In 1895, the export of the Quillaja or 'Cascara de Quillaja,' as it is called, amounted to 53,478 pesos; in 1896, 43,996 pesos worth were exported. The average price is 5 Chilean centavos per

kilo (2.2 pounds) of bark.

"The inner bark contains a saponaceous substance. The bark is broken into pieces, dropped in boiling water and stirred, when it gives up its soap. This soapy water after cooling is rubbed on the grease spot with a brush. It is not necessary to wash out the Quillaja afterwards, as it leaves no spot. This bark is the favorite grease remover in Chile, both among Chileans and Europeans. As a hair wash it is said to be excellent. It is highly prized by wool manufacturers. Of late years the demand has become so great that the trees are being rapidly destroyed. This plant is worthy serious attention. Small forests of soap bark should be started in southern California. The seed must be sown in seed beds, or better, in shallow boxes. It grows rapidly." (D. G. Fairchild.)

## **3361.** Greigia sphacetata.

Chupon.

From Santiago, Chile. Received through Messrs. Lathrop and Fairchild (No. 168), June 1899.

"Leaves used in the manufacture of *Chapayas*, or native hats. Bases of flowers edible, sweet, and very juicy. A species little known outside of botanic gardens in Europe. Flowers showy. Valuable for breeding purposes. Seeds should be sown and cared for just like those of pineapple." (D. G. Fairchild.)

#### 3362. Gomortiga Nitida.

From Santiago, Chile. Received through Messrs. Lathrop and Fairchild (No. 167), July, 1899.

"A laurel, with fruits as large as a plum, used in Chile for preserves. The nuts must be soaked for several weeks before planting, as they germinate with difficulty. Should be planted in Florida and Louisiana. A good soil is necessary. Light frosts do not injure it." (D. G. Fairchild.)

#### **3363** to **3366**. Cucumis melo.

Muskmelon.

From Santiago, Chile. Received through Messis. Lathrop and Fairchild (Nos. 182 to 185), June, 1899.

"The following four numbers were grown by Mr. Izquierdo, who has tested various European and American sorts of muskmelons here and found the above sorts of